

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P37 12PCT 53	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/FR2004/000714	International filing date (day/month/year) 23.03.2004	Priority date (day/month/year) 31.03.2003	
International Patent Classification (IPC) or national classification and IPC			
Applicant PELLENC			

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.		
2.	This REPORT consists of a total of _____ sheets, including this cover sheet.		
3.	This report is also accompanied by ANNEXES, comprising:		
a.	<input type="checkbox"/>	(sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:	
	<input type="checkbox"/>	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).	
	<input type="checkbox"/>	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.	
b.	<input type="checkbox"/>	(sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4.	This report contains indications relating to the following items:		
	<input checked="" type="checkbox"/>	Box No. I	Basis of the report
	<input type="checkbox"/>	Box No. II	Priority
	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
	<input type="checkbox"/>	Box No. IV	Lack of unity of invention
	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<input type="checkbox"/>	Box No. VI	Certain documents cited
	<input type="checkbox"/>	Box No. VII	Certain defects in the international application
	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

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International application No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-21 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 1-21 _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* _____ received by this Authority on _____
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/11-11/11 _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2-8, 10-17	YES
	Claims	1, 9, 18, 20, 21	NO
Inventive step (IS)	Claims	2-4, 7, 10-12, 15, 17	YES
	Claims	5, 6, 8, 13, 14, 16, 19	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

1. Reference is made to the following documents in the present notification:

D1: EP 0 974 262 A (VISION DEVICE S R L; BACCHINI LEO (IT); BACCHINI SANDRO (IT); VICE) 26 January 2000 (2000-01-26)

D2: DE 195 30 356 A (HILKER ANDREAS) 10 April 1997 (1997-04-10)

D3: DE 197 23 770 A (HYDRO AGRI DEUTSCHLAND GMBH) 10 December 1998 (1998-12-10)

D4: FR 2 806 583 A (CAPELLE HUBERT) 28 September 2001 (2001-09-28)

D5: DE 199 60 044 A (MERTEN KG PULSOTRONIC) 21 June 2001 (2001-06-21)

2. INDEPENDENT CLAIM 1

- 2.1 The present application fails to comply with the requirements of PCT Article 33(1) since the subject matter of claim 1 does not meet the requirement of novelty defined in PCT Article 33(2).

Document D1 describes (the reference signs between

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

parentheses apply to this document) a method for analysing the structure of crop rows, which method is suitable for use in a continuously moving machine including an artificial vision system (6, 15) operating in direct transmission mode and enabling the detection of light blanking between one or more transmitters (cover 15 transmits light even though it is reflected light; see column 5, lines 10-19, where the use of a cover having a uniform colour to ensure correspondingly uniform illumination is described) and one or more receivers (cameras 6 which are, by definition, light receivers) arranged in facing positions on either side of the row (see figure 3: each receiver 6 has a corresponding transmitter, which is the surface portion of the cover 15 that acts as the background for the image sensed by the camera; as shown in figure 3, each camera 6 and the corresponding surface portion of the cover 15 are located in facing positions on either side of the row, which is defined by the vertical line running from the stem 8 perpendicularly down to the ground), wherein the data generated by the light blanking is processed by an electronic processing system (10) programmed or configured to analyse the elements of the crop row structure both in the daylight and at night (see column 5, line 2).

3. INDEPENDENT CLAIM 9

3.1 The present application fails to comply with the

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

requirements of PCT Article 33(1) since the subject matter of claim 9 does not meet the requirement of novelty defined in PCT Article 33(2).

Document D1 describes (the reference signs between parentheses apply to this document) a device for analysing the structure of crop rows, including an artificial vision system (6, 15) operating in direct transmission mode and consisting of one or more transmitters (cover 15 transmits light even though it is reflected light; see column 5, lines 10-19, where the use of a cover having a uniform colour to ensure correspondingly uniform illumination is described) and one or more receivers (cameras 6 which are, by definition, light receivers), which artificial vision system is arranged in such a way that, when it is mounted on a machine, one or more of the opto-electronic components thereof can be arranged in facing positions on either side of the row (see figure 3: each receiver 6 has a corresponding transmitter, which is the surface portion of the cover 15 that acts as the background for the image sensed by the camera; as shown in figure 3, each camera 6 and the corresponding surface portion of the cover 15 are located in facing positions on either side of the row, which is defined by the vertical line running from the stem 8 perpendicularly down to the ground) straddled by said machine, wherein said device further includes an electronic processing system (10) programmed to process the information generated by the light blanking in

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>order to display and analyse the elements of the crop row structure both in the daylight and at night (see column 5, line 2).</p> <p>4. DEPENDENT CLAIMS 5, 6, 8, 13, 14, 16 AND 18 TO 21</p> <p>These claims do not contain any features which, when combined with the features of any one of the claims to which they refer, might define subject matter that complies with the requirements of novelty and inventive step of the PCT (PCT Article 33(2) and (3)).</p> <p>For claims 18 and 20, see D1, column 4, lines 20-27; for claim 21, see D1, computer 10, which is fully capable of processing data to determine plant vigour; for claims 5, 13 and 19, see D2, column 3, line 66 to column 4, line 13, as well as figure 4; for claims 6 and 14, see D3, column 8, lines 7-14; and for claims 8 and 16, see D4, column 2, lines 5-36.</p> <p>5. DEPENDENT CLAIMS 2, 3, 4, 7, 10, 11, 12, 15 AND 17</p> <p>The combination of features in claims 2, 3, 4, 7, 10, 11, 12, 15 and 17 is not found in or obvious from the prior art disclosed in any of the documents cited in the search report.</p> <p>6. The industrial applicability of the invention is obvious.</p>